

April 10, 2020
November 16, 2020 (Update)

Mr. John Lee, Chairman
135 School Street
Walpole, MA 02081
United States

**Re: Cedar Crossing Apartments and Cedar Edge Condominiums
Comprehensive Permit (40B) Peer Review
Walpole, Massachusetts**

Dear Mr. Chairman:

Tetra Tech (TT) has reviewed specific submittal materials for the above-referenced Project to assist the Town of Walpole Zoning Board of Appeals (Board) in its Comprehensive Permit review of the proposed Cedar Crossing and Cedar Edge developments. The following letter provides comments generated during our review of Applicant submittals and generally focuses on substantive concerns that speak to issues whose eventual resolution may substantially impact Project design or could otherwise result in potentially unsafe conditions or unanticipated impacts.

The comments below are intended to guide discussion as well as inform development of the revised plans and we expect to provide more detailed comments as the design and discussion advances. Our review is based on materials received from the Board comprising the following pertinent documents:

- A Comprehensive Permit Application package prepared by 55 SS LLC.
- A plan (Site Plans) set titled "Site Plan for Proposed Multifamily Development, 51-53-55 Summer Street, Walpole, MA", dated January 10, 2020, prepared by Howard Stein Hudson (HSH).
- An architectural plan set dated January 7, 2020, prepared by Mangel Architects, Inc. (MAI).
- A Stormwater Management Report (Stormwater Report) dated January 10, 2020, prepared by HSH.
- A Traffic Impact Assessment (TIA) titled "Traffic Impact and Access Study, Proposed Residential Development, 55 Summer Street, Walpole, MA" dated January 6, 2020, prepared by Bayside Engineering (BSE).
- A memorandum assessing the proposed pedestrian volumes associated with the Project, dated March 10, 2020, prepared by BSE.
- Comment letters from Town Boards, Commissions and Departments.

The Plans and accompanying materials were reviewed for good engineering practice, overall site plan efficiency, stormwater, utilities, traffic and public safety. In general, the plans and supporting materials were well prepared and we appreciate the clarity and completeness of documents provided. Our initial comments are provided below.

TT 11/16/2020 Update

Over the course of the last several months the Applicant and its consulting team have been making iterative and fluid changes to the proposed plans culminating in the most recent plan submittal dated October 14, 2020. The applicant has also been providing supplementary information generally in response to comments received during the review process up to and including the following information:

Infrastructure Northeast

November 2020 Submittals

- Lot 1 Waivers List
- Lot 2 Waivers List
- Waiver Plan by HSW dated 11-09-2020
- Applicant's Response to Comments – Police (10-30-2020)
- Applicant's Response to Comments – Davis Square (11-04-2020)
- Applicant's Response to Comments – DPW Town Engineer (11-02-2020)

October 2020 Submittals

- Applicant Cover Letter dated 10-21-2020
- Lot 1 Waivers List
- Site Plan by HSW dated 10-14-2020
- Presentation Plan by HSW dated 10-14-2020
- Misc. Building Plans and Renderings – Oct. 2020
- Bayside Memorandum dated 10-06-2020 re: Triangle Intersection – Signalization Assessment

September 2020 Submittals

- Applicant Cover Letter dated 09-15-2020
- Site Plan by HSW dated 09-14-2020
- Presentation Plan by HSW dated 09-14-2020
- Bayside Memorandum dated 09-28-2020 re: Railroad Crossing Assessment
- Applicant's Response to Comments – Davis Square (08-13-2020)

July 2020 Submittals

- Applicant Cover Letter dated 07-08-2020
- Site Plan by HSW (sheets 1 & 2 of 5) dated 06-29-2020

May 2020 Submittals

- Applicant's Response to Comments – Tetra Tech (04-10-2020)
- Various Responses to Comments from Town Departments
- Bayside Memorandum dated 04-16-2020 re: Internal Analysis
- Bayside Memorandum dated 03-10-2020 re: Supplemental Pedestrian Information
- Masse Fire Protection Services – Hydrant Test Report dated 03-25-2020
- Misc. Building Plans, Renderings and collateral information

As evidenced by the breadth of submittals note above, in general, the applicant has been advancing discussion of topics as requested but it has been difficult to determine a clear intent as most of the information provided deviates from what was requested and in several cases does not address our request; opting instead to redirect responsibility to others.

Recent dialogue has trended in a more positive direction and plan changes do represent progress toward addressing our concerns however we still struggle to understand which issues the applicant intends to engage in a cooperative effort toward resolution and which they don't intend to address further.

Our principal outstanding concerns relate to several primary issues which are summarized below.

Single Point of Access – No Emergency Access

The Project has only one means of access serving the entirety of the 300-unit project whose highest density areas are located approximately 2,500 feet from the main entrance off Summer Street. The single access remains a concern as it provides no alternate means of access or egress should the primary entrance be blocked. While we understand chances of a complete shutdown of the access may be remote it is still a possibility that should be addressed given the length of the access road, the presence of several pressure utilities within the roadway and the anticipated traffic volumes coming to and from the site. The applicant has proposed a long “boulevard” entry comprised of two 16-foot lanes separated by a center median to address the lack of a secondary means of access. While a boulevard offers certain benefits, it does not provide adequate assurance that access to the site can always be maintained as both lanes of the boulevard could easily be blocked by a water main break, downed tree or automobile accident. We recommend the Project provide an emergency access separate and suitably remote from the main entry that can be available for use on demand by emergency responders and could serve as an alternate general site entry in an emergency.

A gated emergency access has been added and the boulevard eliminated but replaced by a 26-foot-wide driveway entrance through the first crossing and 24-foot driveways thereafter. See plan dated 1-10-21.

Water and Sewer Capacity Documentation

The Project will result in the near doubling of the size of the South Walpole community and no information has been provided by the applicant on which the ZBA can reach a factual conclusion that adequate capacity exists in either the public water or sewer system. Given the proposed development is substantially larger than otherwise would be allowed under current zoning it is unlikely that the original design of the municipal water and sewer systems would have contemplated demands of the magnitude proposed. If a permit is issued, we recommend the decision include a condition requiring the applicant to provide documentation demonstrating the public water and sewer systems have adequate capacity to serve the development without risk to safely and without risk to the surrounding community.

See Water memo dated 12-16-20 and Sewer memo dated 12-17-20 both by Onsite Engineering. The Applicant will work in cooperation with Town DPW and Engineering staff regarding water and sewer.

Offsite Traffic/Pedestrian Impacts

The Applicants traffic analysis indicates the Project will result in a significant degradation in level of service at the intersection of Summer, Washington and Neponset Streets and has offered no proposed measures to mitigate Project impacts. Given the intersection is close to the Boynton School, is close to an existing railroad crossing, is subject to massive situational demands from events at Gillette Stadium and currently experiences significant traffic queues, the added volume of both vehicles and pedestrians from the Project presents a safety concern that should be addressed.

To date, the Applicant has consistently deferred responsibility for addressing these project-related impacts to the Town but recent communication with the applicant's consulting team indicates some willingness to explore potential mitigation which we hope addresses the issues of concern including but not limited to degradation of level of service and suitability of pedestrian accommodations.

Applicant will agree to construct offsite improvements in partnership with the Town of Walpole generally as shown on the intersection improvement plans subject to execution of an agreement with the town which is acceptable to the Applicant. See conceptual plan by Bayside Engineering dated 12-10-20.

Fire Truck Access Limitations

The revised roadway and building layout still include several instances where fire truck access is compromised. Most notably, parking layout adjacent to the now 6-story buildings significantly compromises the ability for emergency responders to stage a response or to access the building with equipment or personnel. At a minimum, the Project must provide adequate area in which a responding fire truck and its personnel can immediately and reliably access the structure including providing a second means of accessing below building parking. Similarly, access roads should be designed in a manner that, if avoidable, does not require fire trucks to back up in order to change direction preferably by utilizing turnaround circles at the end of roadways as described in town subdivision guidance.

The applicant has made several revisions to the plans to address these concerns; 1) in order to shorten the length of driveway "B" to less than 150 feet as required by the code, the buildings on driveway "B" have been reconfigured from three, 4-unit buildings to two 6-unit buildings (see revised HSH site plan dated 1-10-21); 2) To make access to the multi-family buildings more direct for first responders, multiple parking spaces have been removed from the front of each building (see revised HSH site plan dated 1-10-21); 3). The applicant has offered to provide an additional fire access to the garages of the multi-family buildings as well as staging areas adjacent the multi-family buildings at these fire access ways. The staging areas will be accessed from striped no parking areas in the parking lot directly in front of the staging areas. (See revised HSH site plan dated 1-10-21 and garage access sketches from Mauge Architects dated 1-6-21 and 1-7-21) It should also be noted that in addition to the special added fire access doors, the L shaped building has 3 internal fire rated stairwells containing standpipes that have hose connections and the linear building has two such stair wells that lead from each entrance to the garage level. Therefore, all parts of the garage can be reached without long hose runs even without accessing the additional fire access doors.

Applicant responses and supplemental information noted above were reviewed against our previous comment letter (April 4, 2020) and each comment has been updated to reflect our current understanding. Comment numbers will be maintained throughout our review and as comments are resolved they will be removed from future updates leaving only relevant items. New comments will be added at the end and assigned a continuing number. Text shown in "gray" represents information contained in previous correspondence while new information is shown in "black".

Comments noted as "**Resolved**" include those that have either been addressed directly by the Applicant or can be easily incorporated into the Final Plans submission. These comments will be removed from future updates.

Comments noted as "**Deferred**" include comments whose eventual resolution are not expected to fundamentally impact the design but will require additional documentation to confirm compliance with applicable standards and expectations. These are typically comments generated based on detailed information included in the original submittal that has not been updated per the most recent plan changes

Site Plans

The Site Plans were well organized, clear, readable, and professionally done. They show a proposed project that is relatively dense but does consider the natural and topographic constraints of the site. Our principal concern is that the proposed density provides almost no common/bulk recreation space and leaves almost no additional space to accommodate unanticipated needs or unaddressed design requirements.

The Site Plans provide a good introduction to the Project and its various components and shows the Project is placed in consideration of limiting impacts to wetland resource areas. In general, the layout reflects the

natural and physical constraints at the site but leaves very little un-assigned space to guaranty compliance with stormwater performance criteria, accommodate more robust emergency access, address wetland mitigation or other similar demands that are likely to present as design and discussion develops. The following specific comments are offered to identify areas where additional information is required, or changes are requested to address questions or support further review.

The Applicant has submitted several revised plans and recent coordination suggests additional changes may be forthcoming. The following information reflects our current understanding.

1. For the purposes of clarity and coordination we request future submittals include proposed street names on all sheets and that those names be coordinated with the Walpole Building Department to confirm acceptability prior to the next submission. **Applicant has addressed - Resolved**
2. Similarly, we request unit numbers be added and included on all sheets. **Applicant has addressed - Resolved**
3. Please clarify if any of the proposed development is intended to become the responsibility of the town or its departments. For example, will the project seek public acceptance of the roads or utility infrastructure by the town. **Applicant has addressed by indicating all roads will be private and acceptance by the Town will not be pursued - Resolved**
4. The Project's common boundary with the commuter rail presents a significant safety concern particularly given the lack of alternate open space on the site. We recommend the Project include fencing or other suitable measures to preclude access to the railroad tracks from the site. Additionally, consideration should be given to limiting development along the boundary with the railroad track to allow for greater separation.

Nov. 16, 2020 Update - The Applicant has proposed an intermittent six-foot chain link fence along sections of the Project boundary with the railroad track with breaks at vernal pools. We question the value of a non-continuous fence and recommend any decision include a condition requiring a continuous (uninterrupted) fence running along the entire boundary of the railroad tracks with fence endings designed to return into the developed site.

The applicant will agree to a condition to install a continuous fence, so long as the Conservation Commission approves placing fencing in the wetlands.

5. The Project includes almost 300 units with only a single means of access whose connection to the local street network is located within 50 feet of a commuter rail crossing. While there are no known prohibitions to locating a side street so close to the crossing, we recommend the applicant consider the potential of relocating the connection further away from the crossing. We also recommend the applicant provide a statement or similar confirming the proposed design meets Federal Highway Design Guidelines for At-Grade Intersections Near Highway-Railroad Grade Crossings, and in particular, Chapter 4 – Channelization with regard to prevention of motorists from driving around crossing gates. Bypassing gates is a concern given the proximity of the site drive and orientation to the crossing gates.

Nov. 16, 2020 Update - The Applicant has not offered any proposed mitigation or provided a statement that the proposed design meets the guidelines noted. While the applicant has offered some documentation suggesting the risk that exiting Project traffic would attempt to bypass the gates is remote it has offered no measures that could reduce the risk. We agree the risk appears to be remote however we recommend the applicant consider small improvements such as extending arms that

could mitigate risk given the site driveway's proximity and approach to the crossing.

The applicant corresponded with the MBTA and with the Department of Public Utilities (DPU) rail safety group. See applicant's letter to the DPU sent via email dated 11-30-20 and DPU acknowledgement of receipt dated 12-1-20.

6. Several locations within the development do not provide convenient access for emergency vehicles and require fire trucks and larger emergency vehicles to back up which is not typical for new developments. We recommend the applicant coordinate with Walpole Fire Department to determine requirements for access and make every possible accommodation. In addition, the Fire Truck Turning Plan shows several locations where the fire truck travels over the curb which should be fixed in future submittals

Nov. 16, 2020 Update - The Applicant has reduced the number of instances where access is a problem however several issues remain. Units 9-12 present a very awkward and difficult access scenario for fire trucks requiring the truck to back up more than 200 feet along a curve and execute a multi-point turn in order to exit. The Fire Department has been consistent in its requests that all roads include circular turnarounds at the end to allow fire trucks to change direction. Current site plans show parking along the entire front of Building's 1 and 2 which significantly impairs the Fire Department's ability to access the building or stage an emergency vehicle. The applicant should coordinate with the Fire Department to provide clear fire lanes and access points acceptable to the Fire Department and provide a Fire Truck Access Plan based on the final proposed roadway configuration and conforming to applicable state and federal access criteria.

See response to Fire Truck Limitations above.

The 16-foot entry boulevard lane widths do not meet minimum 20-foot widths required by National Fire Protection (NFPA) Standards. Reduction to required minimum lane widths requires approval from the Authority Having Jurisdiction (AHJ) who in this case is the Walpole Fire Chief. We recommend the Board require the applicant to document the Fire Chief's approval of the proposed lane widths prior to completing its review.

Nov. 16, 2020 Update - The boulevard entry remains however lane widths are not provided on the most recent plans. The applicant has stated the boulevard entry meets the "NFPA standard" however NFPA 18.2.3.4.1.1 which explicitly states "Fire department access roads shall have an unobstructed width of not less than 20 ft (6.1 m)." suggest otherwise since boulevard lanes appear to still be approximately 16 feet with an obstructing island between. The single access remains a concern and it is our opinion that a secondary emergency access is warranted.

The driveway entrance will be 26 feet through the first crossing and 24 feet thereafter.

7. The proposed layout and density leave very little available space for snow storage and snow storage areas identified on the plans are in areas where we would typically expect landscaping or similar site amenities. The lack of practical snow storage area is a function of overall site density combined with restrictions for placing snow in wetlands or stormwater basins. We recommend limiting snow storage near light posts and fire hydrants due to risk of damaging structures.

Nov. 16, 2020 Update – Recent plan changes that reduce impervious footprint and proposed 25-foot buffer to wetlands mitigate some of our original concern. However, the proposed density still appears to present challenges with snow removal. Given the roads are not proposed for acceptance by the Town and maintenance/snow removal will be the sole and permanent responsibility of the

development our only suggestion is that a decision include a condition requiring snow removal and storage as a Project responsibility and that it be done in compliance with all Conservation Commission and in a manner that maintains fire department access at all times. - **Resolved**

8. The Garden Area proposed on Partridge Lane is a great idea but should include a clearly designated area for management of refuse to prevent disposal of refuse in wetlands or the 25' no disturbance zone. We encourage providing similar areas for community gardens elsewhere on the site. Applicant has addressed - **Resolved**
9. The proposed connecting road between Spruce Lane and Partridge Lane near Building 3 is only 20 feet wide which is not a suitable width for two-way circulation particularly considering the constrained shoulder width at the stream crossing. We recommend this be addressed in future submittals as this roadway section provides a significant benefit for emergency access and general site circulation. Applicant has addressed - **Resolved**
10. Spruce Lane and Partridge Lane intersect with Red Tail Drive within 50 feet of each other. Typically, 150' of separation between intersections is required to ensure proper/safe operation. We recommend future submittals either consolidate Partridge and Spruce prior to connecting at Red Tail or provide additional separation between intersections. Applicant has addressed - **Resolved**
11. The proposed housing units and parking are located very close to the roadways. We recommend the applicant consider incorporating raised crosswalks (speed tables) as a means of regulating travel speeds through the development.

Nov. 16, 2020 Update – The applicant has agreed to provide speed tables where specified by their Traffic Engineer. This issue can be deferred and resolved in a Final Plan submission. - **Resolved**

12. Does the proposed geometry of Balsam Lane cul-de-sacs preclude incorporation of a center island?

Nov. 16, 2020 Update – The Applicant has addressed conceptually but some adjustment will likely be required to address fire truck access which can be deferred and resolved in a Final Plan submission – **Resolved**

The applicant has reduced the diameter of the islands to provide 30 feet of road width so that emergency vehicles can navigate even if a car is illegally parked at the island. The applicant has agreed to install no parking signs at each island.

13. We recommend considering adding a median break and crosswalk at the mail area. We also recommend a median break or alternate solution that allows vehicles leaving the five single family homes near Summer Street and travelling deeper into the development to do so without having to turn around at Summer Street.

Nov. 16, 2020 Update - The applicant has not addressed this comment in its latest plans however this issue is part of the larger discussion related to a secondary means of access. We still maintain that traffic leaving the five single family homes should be able to turn left to head back into the development without having to turn around at Summer Street.

The boulevard has been removed so there will be no impediment to turning left, back into the development.

14. We recommend the applicant consider a slightly thicker roadway pavement section including at least 4.5 inches of bituminous concrete given the scale of development, density and anticipated traffic volumes.

Nov. 16, 2020 Update - The applicant is responsible for roadway maintenance and the proposed pavement thickness is reasonable. - **Resolved**

15. The plans show several stormwater basins immediately adjacent to proposed homes, in some cases mere feet from doors and walkways. In our opinion the plans show an extremely aggressive layout that provides almost no flexibility and does not incorporate adequate means to access and maintain the systems as required. We recommend the applicant consider maintaining at least a 50-foot offset between the high-water line of a stormwater basins and forebays and an occupied structure. At a minimum, the design should show space required to meet requirements of the stormwater standards including maintenance access and separation from wetlands and surface waters. **Applicant has addressed - Resolved**
16. Several ponds appear to have inaccurate labels. Please review and correct on future submittals and make sure labeling is consistent with that used in stormwater report and supporting analysis. **Applicant has addressed - Resolved**
17. We request the applicant provide a Construction Phasing Plan showing the anticipated sequence of construction and identifying proposed locations and sizes of construction staging and stockpile areas.

Nov. 16, 2020 Update - The Applicant has provided no information on how the Project will be constructed or phased. We continue to recommend the Applicant provide a detailed construction management plan showing construction phasing, proposed trucking routes/hours, contractor parking, laydown areas and construction trailer locations. The plan should also include proposed work hours and emergency contact information.

The applicant will comply with Walpole regulations regarding work hours. The applicant will provide a phasing plan prior to the issuance of building permits within the NPDES permit and will provide a copy to the town. The information requested above regarding proposed trucking routes/hours, contractor parking, laydown areas and construction trailer locations will not be available until construction drawings are complete and contractors engaged.

Grading and Drainage Plans

The grading shown on the plans is understandable and complete. Plans show appropriate grade transition slopes and walls in locations where likely required. The following are comments specific to the grading and drainage plans. The applicant has submitted revised plans but not with the same level of detail included in the original submittal. Many of the comments originally noted likely still apply but were based on information presented in prior plans which is not currently available for review. However, based on the quality and completeness of information originally provided we can make informed assumptions regarding the current plan with the expectation that final documentation will be provided with a Final Plan submittal.

18. The plans show several stormwater basins immediately adjacent to proposed homes, in some cases mere feet from doors and walkways. In our opinion the plans show an extremely aggressive layout that provides almost no flexibility and does not incorporate adequate means to access and maintain the systems as required. We recommend the applicant consider maintaining at least a 50-foot offset between the high-water line of a stormwater basins and forebays and an occupied structure. At a minimum, the design should show space required to meet requirements of the stormwater standards including maintenance access and separation from wetlands and surface waters.

Nov. 16, 2020 Update - The revised plans appear to still show basins and other stormwater features very close to buildings and walks. We recommend any decision include a condition requiring

minimum offsets from proposed stormwater detention basins or similar mitigation features unless specifically authorized by the Board.

The applicant appreciates the discussion on the 11-17-20 call. See the revised plans (dated 1-10-21) showing relocated units.

19. The plans show several stormwater basins immediately adjacent to proposed homes, in some cases mere feet from doors and walkways. In our opinion the plans show an extremely aggressive layout that provides almost no flexibility and does not incorporate adequate means to access and maintain the systems as required. We recommend the applicant consider maintaining at least a 50-foot offset between the high-water line of a stormwater basins and forebays and an occupied structure. At a minimum, the design should show space required to meet requirements of the stormwater standards including maintenance access and separation from wetlands and surface waters. Applicant has addressed - **Resolved**
20. Several ponds appear to have inaccurate labels. Please review and correct on future submittals and make sure labeling is consistent with that used in stormwater report and supporting analysis. Applicant has addressed - **Resolved**
21. Please locate all test pits on the grading and drainage plans. Applicant has addressed – **Resolved** with confirmation in Final Plans.
22. There is a component of off-site flow that originates from the west of Balsam Lane and flows through the homes toward Balsam Lane. Please note accommodations needed to manage off site flow and ensure that flow is considered in stormwater modeling. Similar consideration is required for properties and infrastructure adjacent to the railroad. Applicant has addressed – **Resolved** with confirmation in Final Plans.
23. We recommend identifying the proposed locations of flared ends and rip rap downstream of flared ends. Applicant has addressed – **Resolved** with confirmation in Final Plans.
24. We recommend adding outlet control structure OCS elevation data (i.e. rim, orifices, etc.) into Grading and Drainage Plan sheets. A detail depicting each OCS should be provided to assess constructability and consistency with the Stormwater Report. Applicant has addressed – **Resolved** with confirmation in Final Plans.
25. Please note datum reference on any plans where elevations are shown, also show benchmark references where possible. Applicant has addressed – **Resolved** with confirmation in Final Plans.
26. Please add top of wall elevations to the Grading and Drainage Plans. Applicant has addressed – **Resolved** with confirmation in Final Plans.

Stormwater Report

As mentioned in earlier sections, the proposed design provides very little if any operational or design flexibility due to the proposed density. Our principal concern at this stage of review is that the design, as shown, may not meet applicable performance standards principally due to lack of required separation from groundwater and resulting changes may impact unit viability. The best example of the limited space can be seen in the proposed stormwater basin 5 off Balsam Lane whose forebay is located on the opposite side of the street wedged between two homes and whose infiltration basin extends to the back door of several homes. Since the design is so tight, close review of the supporting stormwater analysis is required to confirm safety and viability of the proposed system. The following comments identify our general areas of concern and should be

addressed in future submittals or responses. Recent plan changes have reduced the amount of impervious area and should provide some relief from the stresses of a tight site but plans still suggest basins are very close to homes.

The applicant appreciates the discussion on the 11-17-20 call. See the revised plans (dated 1-10-21) showing relocated units.

A Stormwater Report corresponding to the recent plan submittal will be needed to confirm compliance with applicable standards and comments noted however that report can be submitted with the Final Plans.

A revised stormwater plan and analysis are forthcoming.

27. Many of the proposed basins appear to be located within 50 feet of a wetland contrary to guidance included in the stormwater standards. We typically recommend 50 feet of separation be provided between the edge of wetlands and the edge of submergence during the 100-year storm event. Applicant has addressed – **Resolved** with confirmation in Final Plans.
28. Please document if the Project qualifies as a Land Use with Higher Potential Pollutant Load (LHUPPL) based on parking count and trip generation and if so modify stormwater design to comply with applicable performance standard. Applicant has addressed - **Resolved**
29. The HydroCAD model is setup well but includes multiple and repeated warnings and oscillations signifying underlying issues. Future analysis should be free of similar warnings and oscillation errors. Applicant has addressed - **Resolved**
30. Provide pre- and post- development drainage figures to confirm analysis areas and incorporate off site flows as needed. Applicant has addressed – **Resolved** with confirmation in Final Plans.
31. The *static* method for calculating recharge was used and therefore exfiltration in the HydroCAD model shall be limited to “constant velocity”. Conductivity to groundwater is used only when the *dynamic* field method is utilized to provide required recharge. Model should be edited to utilize constant exfiltration rates as directed in the stormwater standards. Applicant has addressed – **Resolved** with confirmation in Final Plans.
32. Stormwater reports require a Long-Term Pollution Prevention Plan. (Standard 4). Please provide if available. Applicant has addressed - **Resolved**
33. Provide TSS removal spreadsheets for the 44% required pre-treatment and the overall treatment for each treatment train to confirm proper TSS removal prior to each infiltration bmp. 44% required prior to discharge to the infiltration basins due to rapidly infiltrating soils at the site, test pits will confirm soils at each basin location once they are shown on the plans. (Standard 4) Applicant has addressed – **Resolved** with confirmation in Final Plans.
34. Provide forebay sizing calculations. (Standard 4) Applicant has addressed – **Resolved** with confirmation in Final Plans.
35. Provide monitoring wells at each infiltration basin location. Applicant has addressed – **Resolved** with confirmation in Final Plans.
36. Provide one foot of freeboard in the infiltration basins. Applicant has addressed – **Resolved** with confirmation in Final Plans.
37. Provide detail of drip edge drains. Applicant has addressed – **Resolved** with confirmation in Final Plans.

38. Provide forebay for Basin #4. Applicant has addressed – **Resolved** with confirmation in Final Plans.
39. Provide pipe/culvert/grate sizing calculations to confirm capacity. Applicant has addressed – **Resolved** with confirmation in Final Plans.

Utility Plans and Water and Sewer Impacts

The utility plans provide a comprehensive representation of the range of utilities and connections likely required and generally maintain required offsets between water and sewer infrastructure. The following are comments specific to the utility plans. Utility Plans have not been provided as part of the most recent plan submission however expectations can be reasonably inferred based on information received to date.

40. The plans suggest the development will be served by multiple interconnected sewer force mains. We strongly discourage this approach due to reliability and maintenance issues as well as the potential for hydrogen sulfide production which can result in deterioration of the town's downstream collection infrastructure. Given the size of the development we recommend the applicant consider expanding the reach of the gravity collection system so that all proposed residences connect to a gravity collection system and that force mains be limited to no more than 1,000 feet or otherwise incorporate structures to off gas hydrogen sulfide prior to connection with the municipal infrastructure.

Nov. 16, 2020 Update - The Applicant has made some modifications to address concerns noted however the Final Plans should include detailed sewer system layout and profile information along with pump station and force main sizing information. This issue can be **Deferred** to the Final Plans, but all system construction shall comply with local sewer regulations and should be approved by the Walpole Engineering Department prior to release of any building permits.

Applicant agrees.

41. The development will result in a significant new demand on municipal water and sewer infrastructure. We recommend the applicant provide the Board a memorandum or similar documentation by a licensed Massachusetts engineer proving the Project can be served adequately without impacts to existing or proposed infrastructure or its users. At a minimum the documentation should describe and quantify proposed demand, describe existing infrastructure serving the site, provide calculations demonstrating available capacity/service and clearly describe any improvements that may be needed to town infrastructure to serve the project.

Nov. 16, 2020 Update – No information has been provided to date related to our request. This comment remains unresolved and is in our opinion a matter of public safety. New sewer flows are significant and may result in sewer system overflows downstream since flows of this magnitude are not likely to have been forecasted during original collection system design. This analysis is particularly relevant given the Project's proposed reliance on pumped systems whose discharge characteristics are situationally unique and as such cannot be inferred based on typical daily discharge patterns. Similarly, the sufficiency and safety of the proposed water supply is a concern given the Project is functionally served by a single water main connection in Summer Street and no documentation has been provided that demonstrates adequate supply and pressure is available or that proposed Project demands will not adversely impact service to the surrounding community. It is important to note that since the Project has only one means of access that includes all site utility services any disruption to the main entry road may result in loss of access as well as water and sewer service with limited ability to access any necessary repairs.

See response to Water and Sewer Capacity Documentation section above.

42. We recommend showing proposed valves throughout the proposed water main network to review for proper isolation of water mains in case of a break or necessary maintenance. Applicant has addressed – **Resolved** with confirmation in Final Plans.
43. We recommend the applicant consider consolidating some the individual services prior to connection to the street to eliminate the density and number of utility connections. Applicant has addressed – **Resolved**.
44. Gas services are shown at the front of most buildings. We recommend relocating gas services to the side of the homes where they are less visible. Applicant has addressed – **Resolved**.
45. Applicant should confirm acceptability of hydrant spacing and locations with Fire Department. Applicant has addressed – **Resolved** with confirmation in Final Plans.

Wetlands and Erosion Control

Wetlands have been determined following review by the Walpole Conservation Commission and provide a reliable representation of wetland related site encumbrances. The following are comments specific to wetlands and erosion control. The Project is currently undergoing review by the Walpole Conservation Commission, and we would generally defer to their review under the Massachusetts Wetlands Protection Act. Our comments on the most recent information submitted are provided below

46. The Project proposes several wetland impacts and what appear to be wetland fills likely requiring mitigation at a 2:1 ratio. The plans should identify wetland mitigation areas and incorporate grading necessary to insure viability. Adequate offsets should be maintained between wetland mitigation areas and adjacent development.

Nov. 16, 2020 Update – Mitigation deemed acceptable by the Conservation Commission would satisfy our concerns. – **Resolved**.

47. The project will alter more than 75% of the upland area adjacent to vernal pools. Species which use vernal pools for breeding rely on the adjacent upland for habitat and a significant portion of upland adjacent to vernal pools must be maintained in order to maintain the viability of overall vernal pool species habitat. We recommend the applicant provide a narrative documenting how proposed impacts to habitat meet applicable performance criteria and adequately protect the vernal pools and associated upland habitat.

Nov. 16, 2020 Update – The Applicant has not addressed our concern relative to the loss of upland habitat adjacent to vernal pools which is not addressed under the Massachusetts Wetlands Protection Act or related performance standards. We request the Applicant provide a response addressing the loss of upland habitat and a summary of their related discussion with Conservation Commission.

The applicant has revised the plans to eliminate the former driveway “D” which was in the upland between the two Vernal Pools (VP) along the eastern property line. In doing so the applicant has provided connectivity between the two VPs and has maintained a minimum 50-foot offset to all VPs.

48. Locations of straw wattle on the Erosion Control and Demolition Plan appear to have gaps that could potentially allow sediment and untreated runoff to flow into wetlands (see location adjacent to large ledge outcropping, and at wetland crossing locations). It appears straw wattles terminate at locations of retaining walls and other infrastructure that will be constructed several phases after initial site clearing and land disturbance. Where proposed land disturbance is upstream of existing wetlands, we recommend having the straw wattle shown as a continuous stretch to

ensure sediment-laden water does not travel between sections and impact downstream wetlands and vernal pools. We also suggest more robust perimeter controls, similar to standard measures required by the Walpole Conservation Commission given the extent of wetlands on the site and the totality of upgradient impact. **Applicant has addressed -**

Resolved

49. Limit of clearing adjacent to n/f TS Land Trust LLC TR (87 Summer Street) is nearly on top of property line, recommend moving clearing limit away from property line to increase screening from construction activities and to ensure trees located outside of the applicant's control remain unharmed.

Nov. 16, 2020 Update – Proposed building construction is still shown very close to property lines (approx. 10 feet) leaving little or no room for construction access or for mitigation planting described. We recommend the Applicant provide a section view of Lot 51 (or similar) showing proposed building and planting in relationship to the property line and the existing residence.

The applicant has met with the abutting owners of both 87 -89 and 91 Summer Street to review the plans. The Owner of 87-89 granted the emergency access and utility easement and will not object to the project. The applicant has offered to provide screening plantings to each affected abutter as the abutter wishes. 91 Summer is a heavily wooded lot, and the grade of 91 Summer is generally about 8 feet higher than the finished floor elevation of unit 51 shown on the plan dated 1-10-21.

50. The Project will require coverage under the United States Environmental protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities (CGP) and appurtenant SWPPP, a template for the permit coverage has been included in the Stormwater Report. We recommend a condition requiring the Applicant provide proof of coverage under the permit prior to start of construction. **Applicant has addressed - Resolved**
51. Proposed material storage areas, equipment storage/fueling locations, etc. should be shown on the SWPPP plan. Much of the site is included in buffer zone to adjacent resource areas and we anticipate Walpole Conservation Commission will require these areas be located outside of the buffer zone. **Applicant has addressed - Resolved**

Traffic

Tetra Tech has reviewed the Bayside Engineering, January 6, 2020 TIA for conformance with standard professional practices in the state of Massachusetts for the preparation of traffic impact studies for projects of similar size and nature. The following traffic study elements have been reviewed and generally conform to industry standards:

- Study area intersections evaluated
- Time periods evaluated (weekday peak commuter periods from 7AM to 9AM and 4PM to 6PM)
- Study intersection turning movement count (TMC) data
- Seasonal adjustments
- Consideration of public transportation services in the area
- Crash analysis based on Massachusetts Department of Transportation (MassDOT) crash data
- General background traffic growth rate
- Project trip generation, distribution and assignment

Tetra Tech offers the following comments on the traffic study:

52. Site Tetra Tech recommends that the Applicant provide the horizontal sight triangles for both stopping sight distance (SSD) and intersection sight distance (ISD) on the site plans at all proposed site

intersections and at Summer Street. Applicant has addressed – **Resolved** with confirmation in Final Plans.

53. The project causes a degradation in Level of Service from LOS C to LOS E during the evening peak hour at the intersection of Summer Street at Neponset Street. The additional traffic due to the project on the Neponset Street NB approach causes the degradation and an increase in queue length from 130 to 247 feet. A queue length of 247 feet would spill back through the Washington Street/Washington Street Extension intersection with Neponset Street. The applicant should identify potential mitigation measures to address the project impacts at this location.

Nov. 16, 2020 Update – The Applicant has provided supplemental information but has yet to address the core request to provide a summary of improvements needed to mitigate the significant Project impacts at this location. Despite the Applicant’s repeated indications that it is not the Project’s responsibility to address these issues there have been recent indications that their consulting team is working on potential mitigation and we anticipate and hope for further dialogue. It remains our position that degradation of an already problematic intersection represents a safety issue that should be addressed by the Project particularly given its location relative to the Boynton school and existing and proposed students who are expected to navigate the intersection.

See response to Offsite Traffic / Pedestrian Impacts section above.

54. The site plans do not reflect the latest conditions along Summer Street adjacent to the site driveway (new gates for the railroad crossing are not shown). The plans should be updated to include the newly updated rail crossing. Applicant has addressed - **Resolved**
55. The site plans do not appear to show a sidewalk along the east side of the site driveway connecting to Summer Street. A crosswalk should be provided across the site driveway to connect pedestrians from the west side of the site (where there is a sidewalk proposed) to the east side and the sidewalk that connects to the newly reconstructed sidewalk to the east of the railroad crossing. Wheelchair ramps should also be provided at both corners of the site driveway. Applicant has addressed - **Resolved**
56. We recommend a turn lane warrant analysis be performed for Summer Street at the site driveway to confirm left turns waiting to enter the site will not impact through traffic. Applicant has addressed - **Resolved**
57. The 3/10/20 Bayside memo projects 46 new students from the residential development at the Boyden School on Washington Street, which is approximately ¼ mile from the development. The majority of those students could be expected to be “walkers” to school. Bayside notes that the sidewalks have adequate capacity to handle the additional pedestrian traffic that could be generated by the proposed development. Sidewalk conditions along the entire walk to school route should be evaluated to confirm that the sidewalks are adequate. Crosswalks and detectable warning panels should be confirmed for the proposed walk to school route. Crossing guard locations should be considered.

Nov. 16, 2020 Update – It remains our position that the Project should confirm or otherwise ensure that new students walking from the site to the Boynton School can do so safely. The Applicant has provided a Conceptual Sidewalk Plan showing improvement that will substantially address our concern but has been unclear as to the Project’s commitment to this and other related traffic mitigation. Proposed sidewalk improvements will likely benefit traffic at the intersection and should be considered/evaluated collectively with all other roadway improvements.

See response to Offsite Traffic / Pedestrian Impacts section above.

Contamination History

The property located east of 55 Walpole Street (subject project) is the former Bird Machine Company (BMC) which has a long history of industrial activity from the 1830s until 2004. Most buildings have been demolished and heavy industrial activities are no longer conducted on site.

Based on a review of MassDEPs Reportable Release Lookup database for the subject property, the BMC site has a long history of releases and on-going “remediation” activities are being monitored and managed under the supervision of a Massachusetts Licensed Site Professional and required project reporting and documentation appears to be in order. Release and remediation histories are linked to the site’s primary Release Tracking Number (RTN) 4-3-24222

Current remediation activities do not include active remediation measures but rather consist of monitoring the natural attenuation of contaminants whose status was recently summarized in a Phase V Status & Remedial Monitoring Report dated February 19, 2020. Groundwater on the former BMC site is reportedly discharging to the Neponset River or associated wetlands, and contaminant plumes are described as generally stable or contracting. Based on the location of the subject property, it does not appear that groundwater from the former BMC site would migrate to the subject property.

There are several other sites with release tracking numbers to the north of the subject property; however, releases at these other sites are not expected to impact the subject parcel based on the distance from the subject property and the presence of Cedar Swamp. Other reported releases in proximity of the subject property are of limited volume and/or environmental impact, and no reportable releases were identified on the subject property. We do not require additional information from the applicant related to contamination history adjacent to the site.

Nov. 16, 2020 Update – No action has been requested and the proposed plan changes have no impact on environmental conditions on neighboring sites.

These comments are offered as guides for use during the Town’s review and additional comments are likely to be generated as additional or revised documentation is submitted. If you have any questions or comments, please feel free to contact us at (508) 786-2200.

Nov. 16, 2020 Update – We look forward to continued discussions with the Applicant and their design team regarding the outstanding issues noted above.

Very truly yours,



Sean P. Reardon, P.E.
Vice President



Steven M. Bouley, P.E.
Senior Project Engineer

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